

ABSTRACT

The present invention provides 3,4-isoprene-based polymer with high regioregularity, in particular high tacticity.

Specifically, the present invention provides an isoprene-based polymer, including a structural unit represented by Formula (I) in Claims, wherein the isotacticity of an arrangement of the structural units is 99%mmmm or more in terms of pentad content. Further, the present invention provides a production method for the isoprene-based polymer, which comprises polymerizing an isoprene-based compound in the presence of a polymerization catalyst containing a complex represented by the following Formula (A) in Claims.